## In the claims:

- 1-21. (cancelled)
- 22. (currently amended) A composition comprising a purified non-naturally-occurring pol-I type DNA polymerase, or fragments thereof, capable of DNA synthetic activity, said polymerase derived from Thermotoga neapolitana.
- 23. (currently amended) A composition comprising a mutant <u>pol-I type</u> DNA polymerase, said mutant polymerase derived from a Thermotoga neapolitana DNA polymerase.
- 24. (previously presented) The composition of Claim 23, wherein said mutant DNA polymerase comprises a mutation that reduces a 3'-5' exonuclease activity of said DNA polymerase.
- 25. (previously presented) The composition of Claim 23, wherein said mutant DNA polymerase comprises a mutation that reduces a 5'-3' exonuclease activity of said DNA polymerase.
- 26. (previously presented) The composition of Claim 23, wherein said mutant DNA polymerase comprises a mutation resulting in said DNA polymerase having reduced discrimination against dideoxynucleotides.
- 27. (previously presented) The mutant DNA polymerase of Claim 23, wherein said mutant DNA polymerase comprises one or more amino acid substitutions.
- 28. (previously presented) The mutant DNA polymerase of Claim 23, wherein said mutant DNA polymerase comprises one or more amino acid deletions.
  - 29. (previously presented) The composition of Claim 23, wherein said mutant

DNA polymerase is devoid of an N-terminal 5'-3' exonuclease domain.

30. (previously presented) The composition of Claim 23, wherein said mutant DNA polymerase is devoid of the 283 N-terminal amino acids of native Thermotoga neapolitana DNA polymerase.

## 31-39. (cancelled)

40. (previously presented) A mutant Thermotoga neapolitana DNA polymerase having a mutation that substantially reduces or eliminates 3'-5' exonuclease activity of said polymerase, wherein said mutation is in the 3'-5' exonuclease domain of said polymerase, and further wherein said mutant Thermotoga neapolitana DNA polymerase is a Pol I-type DNA polymerase.

## 41-43. (cancelled)

44. (previously presented) A mutant Thermotoga neapolitana DNA polymerase having a mutation that substantially reduces or eliminates 5'-3' exonuclease activity of said polymerase, wherein said mutation is in the 5'-3' exonuclease domain of said polymerase, and further wherein said mutant Thermotoga neapolitana DNA polymerase is a Pol I-type DNA polymerase.

## 45.-47. (cancelled)

- 48. (new) The mutant Thermotoga neapolitana DNA polymerase of Claim 44, wherein said mutation is a deletion of the 283 N-terminal amino acids of native Thermotoga neapolitana DNA polymerase.
- 49. (new) The mutant Thermotoga neapolitana DNA polymerase of Claim 40, wherein said mutation is a Asp to Ala substitution at position 323 of said DNA polymerase.